



Indiana Department of Environmental Management  
Office of Air Quality  
Rule Fact Sheet  
August 2, 2006  
Updated December 6, 2006

**Development of new rules concerning certain source categories emitting volatile organic compounds**  
**#05-197(APCB) / LSA Document #05-197**

Updates since August 2, 2006:

1. Proposed 326 IAC 8-5-6 has been withdrawn from consideration at the request of affected sources. This language identified VOC control requirements for phenolic-urethane cold-box core making processes using amine gas to catalyze the adhesive binder. Proposed 326 IAC 8-5-7 fuel grade ethanol production at dry mills has been renumbered to 326 IAC 8-5-6.
2. The beginning date of applicability of the new rule 326 IAC 8-5-6 fuel grade ethanol production at dry mills has been changed from January 1, 2007 to May 1, 2007.
3. Per U.S. EPA request, time lines for initial compliance determinations have been incorporated into the requirements of 326 IAC 8-5-6 fuel grade ethanol production at dry mills.
4. Per U.S. EPA request, language concerning compliance determinations has been modified in 326 IAC 8-5-6 fuel grade ethanol production at dry mills to more clearly require compliance, as opposed to merely requiring record keeping of the compliance determinations.

In addition, during the third comment period, IDEM informally proposed revising the control efficiency for fuel grade ethanol plants to 99% from 98%. This revision was in response to recent IDEM permits issued with 99%. However, IDEM has since determined that, while 99% is achievable by some sources, 98% control efficiency more accurately reflects Best Available Control Technology for fuel grade ethanol plants.

## **Overview**

This rulemaking establishes industry specific standards, based on current best available control technology (BACT) analyses, in place of the case-by-case BACT analysis currently required by 326 IAC 8-1-6 for two source categories: Phenolic-urethane cold-box core making processes using amine gas to catalyze the adhesive binder and fuel grade ethanol production at dry mills.

## **Citations Affected**

Amends 326 IAC 8-5-1;  
Adds 326 IAC 8-5-6;  
Adds 326 IAC 8-5-7.

## **Affected Persons**

Phenolic-urethane cold-box core making processes using amine gas to catalyze the adhesive binder and fuel grade ethanol production at dry mills, constructed after January 1, 2007, and which have the potential to emit 25 tons or more of VOC per year.

## **Potential Cost**

There is no foreseeable potential cost of this rulemaking. Establishing industry specific standards, based on current best available control technology (BACT) analyses, eliminates the need for the case-by-case BACT analysis currently required by 326 IAC 8-1-6 increases the timeliness and predictability of permitting for the affected source categories. There should be some cost savings for those operations falling within the scope of these new rules. Affected persons will have advance notice of VOC control standards and will no longer incur the expense of performing a BACT determination.

## **Description**

Currently, new facilities with potential emissions of 25 tons of VOC per year or greater, which are not already subject to

other regulations contained in 326 IAC 8, are required by 326 IAC 8-1-6 to reduce their VOC emissions using BACT. Establishing BACT in these situations is a case-by-case determination based on the maximum achievable reduction in emission feasible, taking into account energy, environmental, and economic impact. BACT analyses can be time and resource intensive, can cause delays in the permitting process, and do not always provide predictability to the owner / operator.

This rulemaking establishes industry specific standards, based on current best available control technology (BACT) analyses, for two source categories constructed after January 1, 2007, and which have the potential to emit 25 tons or more of VOC per year: Phenolic-urethane cold-box core making processes using amine gas to catalyze the adhesive binder and fuel grade ethanol production operations classified as dry mills.

For phenolic-urethane cold-box core making processes using amine gas to catalyze the adhesive binder, an amine gas scrubber system operating with a capture efficiency of 100% and an amine gas destruction efficiency of 99% is required and monitoring, compliance, and record keeping procedures are outlined. Total nonamine VOC emissions are to be limited to 0.05 pound per pound of resin or less.

For fuel grade ethanol production at dry mills, and that have no wet milling operations, owners or operators are required to use at least one of three identified control options: A thermal oxidizer, a wet scrubber, or an enclosed flare. The control option employed must have a capture efficiency of 100% and an overall control efficiency of at least 98%.

## **Scheduled Hearings**

First Public Hearing: August 2, 2006 at 1:00 p.m., Room A, Indiana Government Center South, 402 West Washington Street, Indianapolis, Indiana.

Second Public Hearing: To be determined.

### **Consideration of Factors Outlined in Indiana Code 13-14-8-4**

Indiana Code 13-14-8-4 requires that in adopting rules and establishing standards, the board shall take into account the following:

- 1) All existing physical conditions and the character of the area affected.
- 2) Past, present, and probable future uses of the area, including the character of the uses of surrounding areas.
- 3) Zoning classifications.
- 4) The nature of the existing air quality or existing water quality, as appropriate.
- 5) Technical feasibility, including the quality conditions that could be reasonably be achieved through coordinated control of all factors affecting the quality.
- 6) Economic reasonableness of measuring or reducing any particular type of pollution.
- 7) The right of all persons to an environment sufficiently uncontaminated as not to be injurious to:
  - (A) human, plant, animal, or aquatic life; or
  - (B) the reasonable enjoyment of life and property.

### **Consistency with Federal Requirements**

The amended rule and new rules are consistent with federal rules.

### **IDEM Contact**

Additional information regarding this rulemaking action can be obtained from Sean Gorman, Rules Development Section, Office of Air Quality, (317) 234-3533 or (800) 451-6027 (in Indiana).